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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,808	09/26/2003	Douglas Dillon	115426-978	6880

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EXAMINER
BRUCKART, BENJAMIN R

ART UNIT	PAPER NUMBER
2155	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/671,808	DILLON, DOUGLAS	
	Examiner	Art Unit	
	Benjamin R. Bruckart	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 27-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 27-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 September 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Claims 1-8, 27-30 are pending in this Office Action.

Election

Applicant has elected group I, claims 1-8, 27-30 without traverse.

Specification

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. (Page 10, second para). Applicant is encouraged to change the language to read similar to 'www dot hns dot com' (etc.)

Drawings

The drawings are objected to because:

There is a large black blot on Figures 1 and 2. Clean replacement sheets are kindly requested.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-8, 27 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication No. 20050083949 by Dobbins et al.

Regarding claim 1, a method for supporting address caching (Dobbins: page 2, para 22; Figs. 3a-3b), the method comprising:

collecting data indicating access of network devices within a network (Dobbins: page 8, para 139-149; hello packets);

generating a list specifying addresses corresponding to the network devices based on the collected data (Dobbins: pages 8-9, para 139-163; link state topology); and

preparing a message containing the list, wherein the message is multicast to a plurality of terminals in the network for pre-loading of respective caches of the terminals with the list of the addresses (Dobbins: page 8, para 144-149; Link state packets).

Regarding claim 3, a method according to claim 1, wherein the plurality of terminals in the preparing step are satellite terminals (Dobbins: page 1, para 19; Fig. 1).

Regarding claim 4, a method according to claim 1, wherein the addresses in the generating step include Internet Protocol (IP) addresses and are translated from respective domain names associated with the network devices (Dobbins: page 2, para 23; page 6, para 116; Fig. 3a, 3b).

Regarding claim 5, a method according to claim 1, further comprising: maintaining a count for each of the respective addresses based on the collected data (Dobbins: page 6, para 116).

Regarding claim 6, a method according to claim 1, further comprising: establishing a communication session with a peer process to convey state information for providing redundant operation (Dobbins: pages 8-9, para 139-163).

Regarding claim 7, a method according to claim 1, wherein the message in the preparing step includes,

a first field for indicating a change of one of the addresses in the list (Dobbins: page 3, para 41; page 9-10; para 171, 175);

a second field for indicating age of the list (Dobbins: page 8, para 143); and

a third field for specifying a version of the list (Dobbins: page 8, para 145).

Regarding claim 8, a computer-readable medium bearing instructions for supporting address caching, the instructions being arranged, upon execution, to cause one or more processors to perform the step of a method according to claim 1 (Dobbins: page 15, para 263).

Regarding claim 27, a computer-readable medium storing a data structure for supporting address resolution (Dobbins: page 15, para 263; page 9, para 172-176), the medium comprising:

a first section configured to pre-load a plurality of entries, each of the entries includes a domain name and an associated network address, wherein the entries have been multicast for the pre-loading (Dobbins: page 9, para 156-163); and

a second section configured to store a plurality of entries of domain names and corresponding network addresses that are retrieved independently from the multicast entries (Dobbins: Fig. 3a, 3b VLAN IDs).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent Publication No. 20050083949 by Dobbins et al in further view of U.S. Patent Publication No. 20040184471 by Chuah et al.

Regarding claim 2, the Dobbins reference teaches a method according to claim 1. The Dobbins reference fails to teach low bit rate.

However, the Chuah reference teaches multicasting the message at a low bit rate to the plurality of terminals (Chuah: page 1, para 11-12) in order to reduce the traffic in delivering information to a large number of groups of recipients (Chuah: page 1, para 12).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of Dobbins to include low bit rate multicasting as taught by Chuah in order to reduce the traffic in delivering information to a large number of groups of recipients (Chuah: page 1, para 12).

Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent Publication No. 20050083949 by Dobbins et al in further view of U.S. Patent No. 6,073,129 by Levine et al.

Regarding claim 28, the Dobbins reference teaches a computer-readable medium according to claim 27.

The Dobbins reference fails to teach a hash bucket.

However, the Levine reference teaches a common hash bucket (Levine: col. 6, lines 61- col. 7, line 39) in order to provide a more efficient cache organization for improving system performance (Levine: col. 2, lines 30-35).

It would have been obvious to one of ordinary skill at the time of the invention to create the address caching of Dobbins to include the hash bucket as taught by Levine in order to provide a more efficient cache organization for improving system performance (Levine: col. 2, lines 30-35).

Regarding claim 29, the Dobbins reference teaches a computer-readable medium according to claim 28.

The Dobbins reference fails to teach a hash bucket.

However, the Frey reference teaches entries of the first Levine: col. 6, lines 61- col. 7, line 39) in order to provide a more efficient cache organization for improving system performance (Levine: col. 2, lines 30-35).

It would have been obvious to one of ordinary skill at the time of the invention to create the address caching of Dobbins to include the hash bucket as taught by Levine in order to provide a more efficient cache organization for improving system performance (Levine: col. 2, lines 30-35).

Regarding claim 30, the Dobbins reference teaches a computer-readable medium according to claim 29.

The Dobbins reference fails to teach a hash bucket.

However, the Frey reference teaches entries of the second section further includes a field specifying a next entry of the second section and a field specifying a previous entry of the second section (Levine: col. 6, lines 61- col. 7, line 39) in order to provide a more efficient cache organization for improving system performance (Levine: col. 2, lines 30-35).

It would have been obvious to one of ordinary skill at the time of the invention to create the address caching of Dobbins to include the hash bucket as taught by Levine in order to provide a more efficient cache organization for improving system performance (Levine: col. 2, lines 30-35).

PRIOR ART

U.S. Patent No. 7,210,001 by Frey teaches common hash buckets and doubly linked lists (Frey: col. 19, lines 39-65; col. 13, lines 1-41).

U.S. Patent No. 6,307,843 by Okanoue teaches the building of local network tables in an adhoc network that reads on the independent claim language.

U.S. Patent No. 6,697,325 by Cain teaches link state packets and protocols on col. 3-5.

Remarks

Applicant has elected group 1 without traverse. Applicant is given priority date of 5/23/01 on claims 1, 3, 4, 8 and 27 but claims 2, 5-7, 28-30 contain material not in the parent application.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R. Bruckart whose telephone number is (571) 272-3982. The examiner can normally be reached on 9:00-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin R Bruckart
Examiner
Art Unit 2155

brb

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER